Analysis and Financial Report

Advancing Transportation Construction

Carlos Braceras, P.E., Executive Director Infrastructure and General Government Appropriations Committee July 14, 2016



H.B. 3 2016 - General Session

- The Legislature intends that the Utah Department of Transportation prepare an analysis and financial report on the possibility of advancing construction of road projects currently programmed in the Transportation Investment Fund.
- The analysis should include consideration of the savings or additional costs associated with advancing the projects through the use of either short term debt or long term financing.
- The report should be reported to the Executive Appropriations Committee on or before the July 2016 legislative interim committee meetings.

Scenario 1 Project Schedule

	Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
I-15 Utah County	\$ 450,000,000	12,455,000	6,500,000	2,141,000	14,250,000	150,600,000	264,054,000	
I-15 SL County	\$ 175,000,000	11,000,000	56,000,000	42,000,000	43,000,000	23,000,000		
I-15 Davis County	\$ 150,000,000					6,000,000	59,000,000	85,000,000

		Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
I-15 Utah County	\$	420,000,000	20.000.000	110.000.000	190,000,000	100,000,000	_	-	
I-15 SL County	\$	175,000,000							
I-15 Davis County	· ·	150,000,000		33,333,333	12,000,000	10,000,000	6,000,000	59,000,000	85,000,000
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Scenario 1 Debt Schedules

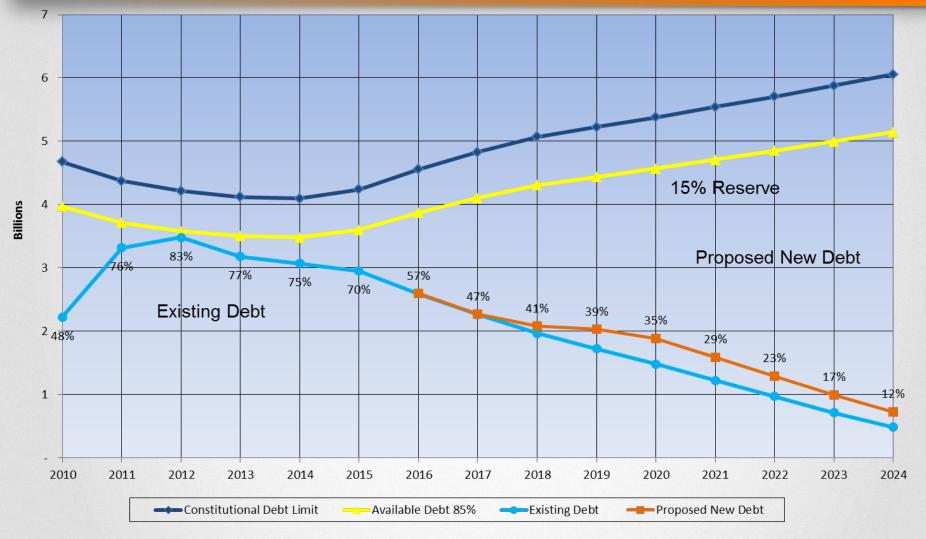
10-Year Debt Schedule

Construction Needs	Total Par Amount Issued	Total Interest	Total P&I
\$420,000,000	\$362,470,000	\$106,945,500	\$469,415,500

Construction Needs	Total Par Amount Issued	Total Interest	Total P&I		
\$420,000,000	\$356,760,000	\$132,414,600	\$489,169,800		

^{*}Estimated debt schedule provided by Zions Public Finance, Inc. / Assumes premium.

Estimated Outstanding Debt & Constitutional Debt Limit Scenario 1: 10-Year Debt Schedule



*Assuming no other bonds are issued

Scenario 2 Project Schedule

	Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
I-15 Utah County	\$ 450,000,000	12,455,000	6,500,000	2,141,000	14,250,000	150,600,000	264,054,000	
I-15 SL County	\$ 175,000,000	11,000,000	56,000,000	42,000,000	43,000,000	23,000,000		
I-15 Davis County	\$ 150,000,000					6,000,000	59,000,000	85,000,000

I-15	Utah County
I-15	SL County
I-15	Davis County

	Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
	\$ 420,000,000	20,000,000	110,000,000	190,000,000	100,000,000	-	-	
	\$ 175,000,000	13,000,000				-		
y	150,000,000			, ,		6,000,000	59,000,000	85,000,000

Scenario 2 Debt Schedules

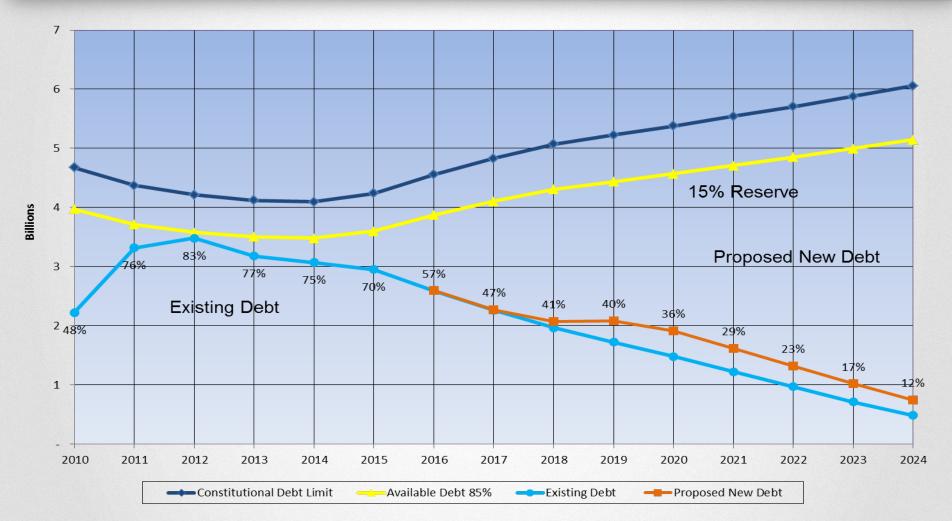
10-Year Debt Schedule

Construction Needs	Total Par Amount Issued	Total Interest	Total P&I	
\$595,000,000	\$391,385,000	\$115,475,250	\$506,860,250	

Construction	Total Par	Total	
Needs	Amount Issued	Interest	Total P&I
\$595,000,000	\$384,950,000	\$142,872,500	\$527,822,500

^{*}Estimated debt schedule provided by Zions Public Finance, Inc. / Assumes premium.

Estimated Outstanding Debt & Constitutional Debt Limits Scenario 2: 10-Year Debt Schedule



*Assuming no other bonds are issued

Scenario 3 Project Schedule

	Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
I-15 Utah County	\$ 450,000,000	12,455,000	6,500,000	2,141,000	14,250,000	150,600,000	264,054,000	
I-15 SL County	\$ 175,000,000	11,000,000	56,000,000	42,000,000	43,000,000	23,000,000		
I-15 Davis County	\$ 150,000,000					6,000,000	59,000,000	85,000,000

	Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
I-15 Utah County	\$ 420,000,000	20,000,000	110,000,000	190,000,000	100,000,000	-	-	
I-15 SL County	\$ 175,000,000	13,000,000	50,000,000	95,000,000	17,000,000	-		
I-15 Davis County	\$ 140,000,000		6,000,000	90,000,000	44,000,000	-	-	-

Scenario 3 Debt Schedules

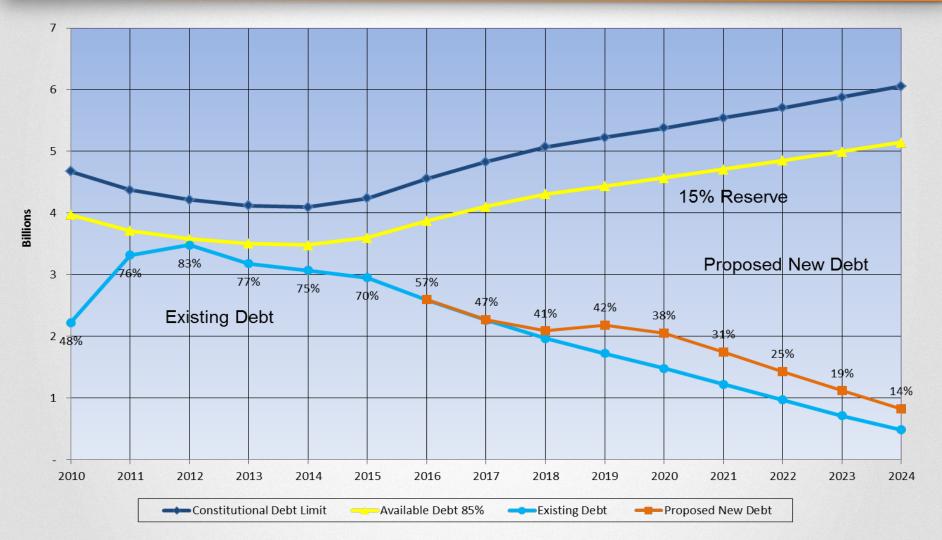
10-Year Debt Schedule

Construction Needs	Total Par Amount Issued	Total Interest	Total P&I
\$735,000,000	\$515,945,000	\$152,228,000	\$668,173,000

Construction Needs	Total Par Amount Issued	Total Interest	Total P&I
\$735,000,000	\$508,060,000	\$188,568,250	\$696,628,250

^{*}Estimated debt schedule provided by Zions Public Finance, Inc. / Assumes premium.

Estimated Outstanding Debt & Constitutional Debt Limits Scenario 3: 10-Year Debt Schedule



*Assuming no other bonds are issued

Scenario 4 Project Schedule

		Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
I-15 Utah County	\$	450,000,000	12,455,000	6,500,000	2,141,000	14,250,000	150,600,000	264,054,000	
I-15 SL County	\$	175,000,000	11,000,000	56,000,000	42,000,000	43,000,000	23,000,000		
I-15 Davis County	\$	150,000,000					6,000,000	59,000,000	85,000,000

I-15 Utah County			
I-15 SL County			
I-15 Davis County			
Other Projects			

		Total	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
,	\$	420,000,000	20,000,000	110,000,000	190,000,000	100,000,000			
	Φ	420,000,000	20,000,000	110,000,000	190,000,000	100,000,000	-	-	
	\$	175,000,000	13,000,000	50,000,000	95,000,000	17,000,000	-		
y	\$	140,000,000		6,000,000	90,000,000	44,000,000		-	-
	\$	710,000,000			35,000,000	210,000,000	245,000,000	220,000,000	

Scenario 4 Debt Schedules

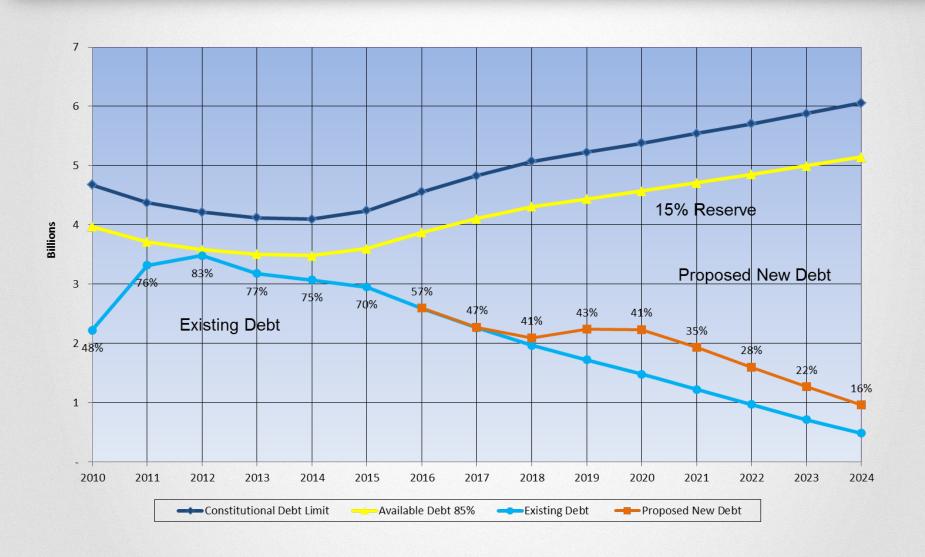
10-Year Debt Schedule

Construction Needs	Total Par Amount Issued	Total Interest	Total P&I
\$1,445,000,000	\$827,145,000	\$244,046,250	\$1,071,191,250

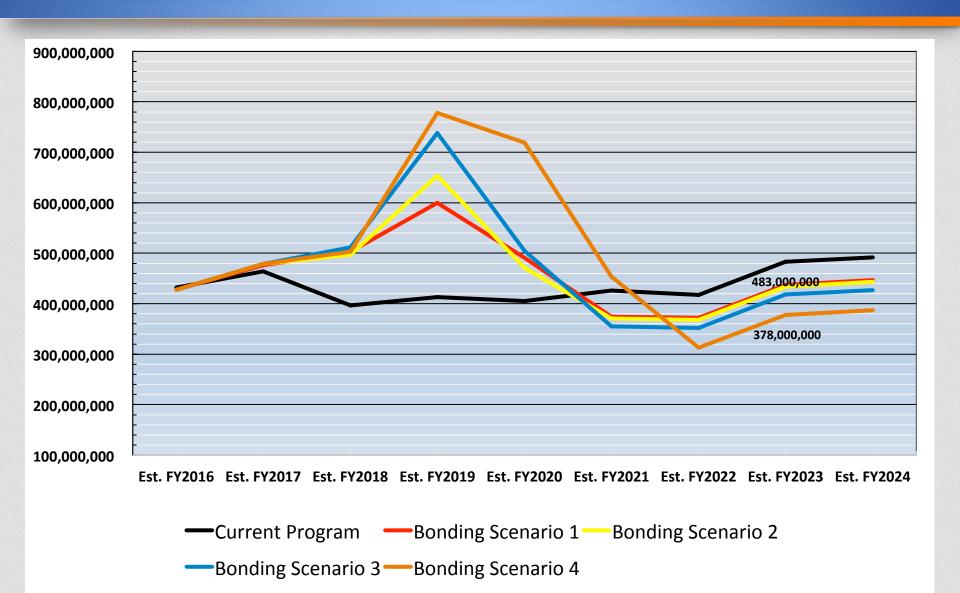
Construction	Total Par	Total		
Needs	Amount Issued	Interest	Total P&I	
\$1,445,000,000	\$800,680,000	\$297,172,250	\$1,097,852,250	

^{*}Estimated debt schedule provided by Zions Public Finance, Inc. / Assumes premium.

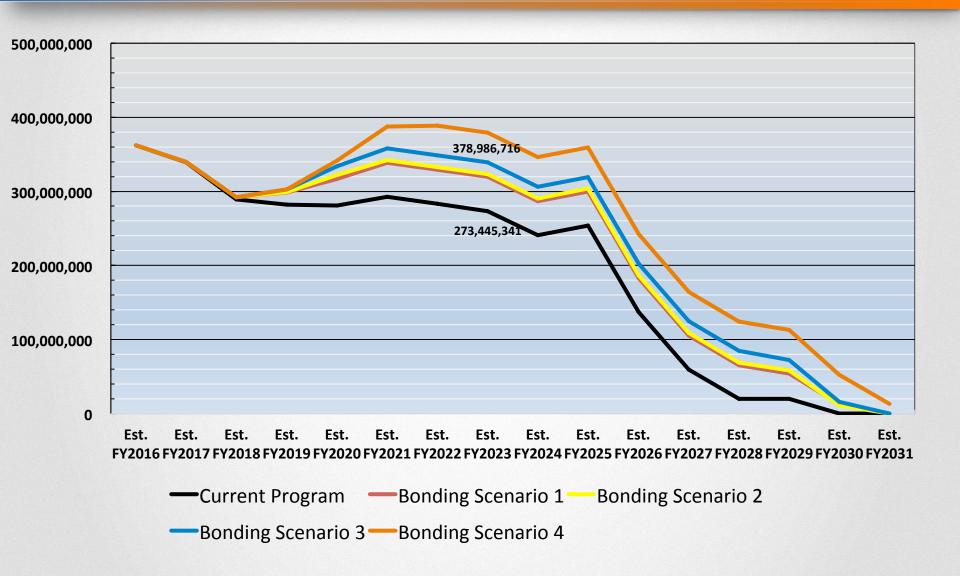
Estimated Outstanding Debt & Constitutional Debt Limits Scenario 4: 10-Year Debt Schedule



Estimated Expenditures 10-Year Debt Schedule



Estimated Bond Payments 10-Year Debt Schedule



General Obligation Bond vs Revenue Bond

Total Principal and Interest for \$1 Billion of Bonds Issued

Term (Yrs)	GO		(Yrs) GO Rev		Difference	
10	\$	1,098,353,797	\$ 1,112,936,664	\$	(14,582,867)	
15	\$	1,180,486,223	\$ 1,202,800,162	\$	(22,313,939)	

^{*}For the revenue bond, all interest rates will increase by 25 basis points and the costs of issuance will increase by \$300,000. Almost every element of the costs of issuance will be higher.

User Costs

Project	Total Delay Savings with Project (Hours)	Total Daily User Cost
Lehi Technology Corridor Study	1,415	\$37,752
I-15 SB from S.R. 201 to 12300 South	5,197	\$138,656
Express Lane from Hill Field Road to I-84	1,509	\$40,260

Other Considerations

- Prison
- Airport
- Economic Correction
- Natural Disasters

Utah Department of Transportation

Report to Infrastructure & General Government Appropriations